SLEEPING BEAR DUNES NATIONAL LAKESHORE FIRE MANAGEMENT PLAN ENVIRONMENTAL ASSESSMENT QUESTIONS AND ANSWERS

After reviewing and analyzing comments received from the public during the formal comment period, January 14, 2005 to March 26, 2005, a number of common questions surfaced, as well as a few individual questions. We have responded to them below, with references to the Environmental Assessment (EA):

1) Why can't the NPS just keep doing what they are doing now?

What we are doing now is not the most effective way to protect life, resources, and property. Without a fuel reduction program that uses a variety of tools, including mechanical removal as well as prescribed fire, wildfires will become increasingly difficult to prevent and control. The fact that we suppress all fires now is actually a change over time. As a result of the lack of periodic fire in some areas, vegetation types change and fuels accumulate and pose increasing threats to park resources and adjacent private property. For much of this area, it is not if, but when a wildfire will occur. Wildfires most often start during conditions that can make them difficult to control. An example of this scenario can be illustrated through the role power lines play in the ignition of wildfires at Sleeping Bear Dunes National Lakeshore (SLBE). When we have dry conditions in the spring, combined with high winds, it is not uncommon for trees or limbs to hit power lines and cause fires. The dry conditions and high winds can be disastrous in trying to control a wildfire. We have worked with power companies to remove some of these lines in fire prone environments, but there are still many miles that remain. If prescribed fires are used to remove fuel accumulations, these types of ignitions can be much easier to control and pose less of a threat to life, resources, and property.

When fire is excluded for an extended period of time, fuels may build up to the point that any ignition causes a fire to burn with an exceptionally hot intensity. This makes the fire more difficult to control, and poses an increased risk to life, resources, and property. Furthermore, this level of intensity not only burns hot enough to kill all, or most of the trees present, but can also destroy the organic material in the soil. A fire of this magnitude can have impacts that last for decades or even centuries. If there are slopes present, the lack of organic materials in the soil after a fire can cause increased erosion into surface waters, with associated disastrous aquatic impacts. Under the conditions of a prescribed fire, a fire can be managed as to not kill trees or destroy the soil, but still accomplish goals such as removing accumulated fuels or restoring ecological integrity.

In addition to the more dramatic reasons for changing our management noted above, the ecology of this area developed with fire as a component. One example of this can be found in a study that was undertaken by the U.S. Geological Survey in the 1990s. It found that old pine stumps located in the back of the Platte River Campground showed several fire scars dating to before European settlement of this area. These fires showed a 10-15 year fire return interval prior to 1910. When fire has been excluded from a vegetative community such as this, the vegetation begins to shift from what normally would be found. Vegetation that is here right now may not be present in the future due to this lack of fire. Certain species, such as white birch, rely on regular disturbances like fire to regenerate, and maintain a presence in the forest. Part of the mission of the National Park Service at Sleeping Bear Dunes National Lakeshore is to restore the processes that shaped the forest ecosystem prior to settlement. The disturbance process of fire should be restored to the extent safely practicable.

2) Why were alternatives to prescribed burning not included, e.g., low-impact clearing, and/or some sort of permit system for selective timber cutting and allowing the public to remove debris?

The NPS has a different mandate than that found in other federal agencies such as the U.S. Forest Service. The parks were established so that there can be a few places where natural processes are allowed to continue without the influence of consumptive human uses such as logging, mining, grazing etc.. In fact, there are a number of NPS-specific regulations that expressly prohibit these sorts of commercial, consumptive uses.

The management of hazard fuels by alternative methods, however, was included in each of the alternatives in the EA. There are some areas, such as those too close to private holdings or those where the fuels have accumulated to a point where fire cannot be used to remove them because it would burn too hot. In these areas, it is more appropriate to reduce the fuels with mechanical means. Several mechanical fuel removal projects are included in the preferred alternative. However, it is impractical to rely on these types of projects to do large scale treatments of forest land, as the material that most needs to be removed is the brush and small trees that have no practical or commercial value. The cost and associated damage of cutting these types of fuels on a large scale is prohibitive. Disposal of cut materials is then an issue, as once the fuels are cut, they become even more flammable. In addition, transport of the fuel from the forest also does not allow natural cycling of nutrients, nor provide the natural disturbance that fire supplies. Mechanical clearing also has more disruptive impacts on forest soils, often leaving a more receptive seedbed for non-native plants to invade a site. We do not have the ability to adequately replicate the effect that fire has on an ecosystem.

3) Why is the NPS adding truckloads of debris to restored roads and driveways and then considering prescribed burning to remove debris?

It is a matter of getting the materials to the right place, in the right amount. The materials that are added to restored roads and driveways are intended to add organic materials that will foster new plant growth and provide some basic protection against foot traffic and erosion. These sites are often entirely lacking in terms of leaf litter and duff, and this debris acts as a means of trapping some of this material and allowing these sites to blend back into the surrounding forest. While it is true that this material is flammable, there is too little of it to be of much consequence in terms of fire spread or intensity. Further, we very seldom bring materials to these sites for this restoration work. Instead, the debris comes from the adjacent, undisturbed lands. If anything, it lowers the flammability of these undisturbed lands by removing the piles of fuels and spreading them on the bare soils to be restored.

4) What exactly is the NPS liability if prescribed burns or WFU result in damage/destruction to private property?

The liability would be the same as any other federal action that might result in damage or destruction to private property through some act of negligence by a federal employee or action. The damaged party has the option of recouping damages through the Federal Tort Claims process. Through this process the damaged party can be made whole again.

5) Why can't local fire departments be reimbursed for their assistance?

By Michigan law, these departments are required to respond to fires within the park boundaries. Federal law prohibits the federal government paying for something that a state is required to provide at no fee. We do however, promote the Rural Fire Assistance program to local fire departments. This program provides federal funding to these departments to better equip and train themselves to respond to wildfires.

6) This process isn't clear to me. We are reviewing the EA of the plan, then a final plan will be produced. Do we get to review the actual plan?

The process is that the Fire Management Plan Environmental Assessment (FMP-EA) is the document where the direction of the program is set. The Fire Management Plan (FMP) itself will follow the direction and guidance set forth in the FMP-EA. Any changes in the preferred alternative will be outlined in the Finding of no Significant Impact (FONSI) document or Errata Sheet that outlines any errors or omissions from the FMP-EA. Any changes noted in the FONSI and Errata Sheet will be accommodated in the FMP. The FMP is then written to conform to the alternative selected and is considered an operational plan that is specific to the task of carrying out the mandate in the FMP-EA. Operational plans are generally not subject to any further public review.

7) What kind of fire management is allowed in proposed wilderness areas?

The proposed wilderness area has almost no effect whatsoever on fire management. The manner in which we will manage wildfires or use prescribed fires depends not on whether they are in proposed wilderness or not, but rather whether they are on the mainland or the islands. The only way in which proposed wilderness could affect fire management is that we would start lower on the scale of Minimum Impact Suppression Tactics in these areas; quickly evaluating whether we could safely suppress a wildfire with hand tools alone before progressing upward through saws, pumps, engines, dozers, etc. In non-wilderness areas, we might start with both hand tools <u>and</u> saws/pumps before progressing upward in equipment.

8) We thought that the NPS was not going to do any planning until the wilderness issue was resolved? Why are you doing this now?

The planning for the development of a Fire Management Plan started a few years ago with public scoping and a contractor developing the materials. Prompt completion of this plan was mandated by Congress and the President as part of a National Fire Plan. The National Fire Plan requires that all units of the National Park Service that have any acreage that could burn have a Fire Management Plan completed by December 31, 2004. At this point we are late in getting the document completed, and cannot wait for the wilderness issue to be resolved. Besides, as noted above, fire management can proceed nearly independently of wilderness status. Wilderness issues at Sleeping Bear Dunes National Lakeshore are being actively addressed as a separate effort.

9) What actions will be taken to ensure that private properties are protected during a prescribed burn?

The very first action taken to ensure this is the mechanical reduction of fuels adjacent to private properties at risk. This mechanical reduction provide a "defensible space" around these properties so that any wildfire – or prescribed fire - can be safely controlled prior to reaching the property. In addition, prescribed fires can only take place under an extremely strict set of conditions, designed to ensure that they do not escape, and with more than enough federal resources in place to control the fire should anything vary from plan.

An analogy that addresses this question was provided during a recent meeting park staff held with local fire chiefs. One of the departments was late for the meeting because they had just responded to a trailer fire, which was a total loss. A local Michigan Department of Natural Resources Fire Officer was at the meeting, and he pointed out the similarities between a prescribed burn and a structural fire training exercise: In a structural fire exercise, the structure is prepared prior to a planned ignition. All of the hazardous or highly flammable materials such as shingles or tarpaper are stripped from the structure,

doors and windows may be removed, and any brush is cut away. A time is set for the ignition, and water supplies and hose lays are made in advance. Weather forecasts are analyzed and considered. All personnel are in place, and under the guidance of a trained Chief, the fire is lit. At that point the fire fighters can extinguish the fire at will.

The same holds true for a prescribed fire. Preparations are made in advance. Hazard fuels are accommodated, and control lines are established. Site-specific spot weather forecasts are obtained and variables such as fuel moisture and relative humidity are monitored. Trained fire staff are in place. Smoke management is outlined and accommodated. The ignition is made on the terms of the Burn Boss, who has a comprehensive "go-no go" checklist that guarantees no important consideration is left out. The fire is structured in such a way that it can be extinguished, if conditions change. It is generally lit in strips, backing into the wind. With each strip, the width of the "black control" extends itself. That is, the area burned acts as a buffer between the fire and the unburned fuel outside of the control lines. If any of the prescription variables begin to move outside of the set limits, the fire is extinguished.

Any fire has the potential of something going wrong, but the guidelines have become so strict over the last several years, that the possibility of an escaped fire from such a controlled environment is extremely remote. Park staff would not depend on any assistance from local fire departments for conducting a controlled burn, unless the local department asked to be involved. All staff to manage a prescribed fire would be brought in from other federal areas.

10) What is the Mangi Environmental Group's experience and expertise in fire management?

Mangi Environmental Group has been contracted to complete 12 Fire Management Plans for the Midwest Region of the National Park Service (all but one complete). In addition to the plans completed in this region, Mangi has had extensive experience in completing fire management documents for a host of other National Park Service and land based agencies.

11) What is the resource inventory of available fire equipment?

Due to the extensive nature of this list, it was not printed in the EA, but will be added as an Appendix to the Fire Management Plan.

12) Define the term "wildlife habitat management."

This comment referenced page 2-12 in the Fire Management Plan Environmental Assessment. The term "wildlife habitat management" could not be located on the indicated page, but the term "improve wildlife habitat" was on the indicated page. The intent of that term in this context is that fire (through one or a combination of several applications - i.e. wildland fire use, prescribed fires and fire suppression) might enhance certain wildlife species in a particular ecosystem. The exclusion of fire from a system that has developed through time with fire as an influence, is likely to demonstrate a vegetation shift, away from vegetation that would naturally be found on the site. This change in vegetation is likely to be to the detriment of native wildlife species. Allowing fire to have some role in fire dependent ecosystems, would benefit those wildlife species that developed through time with fire as a factor. This does not imply that the park would use fire to increase an individual species.

13) What is the definition of "Minimum Impact Suppression Tactics" (MIST)?

The definition of Minimum Impact Suppression Tactics (MIST) is: "The application of strategy and tactics that effectively meet suppression and resource objectives with the least environmental, cultural and social impacts." (Glossary of Wildland Fire Terminology, National Wildfire Coordinating Group, PMS 205).

The primary goal remains suppression of the fire. MIST reflects the need to make unique decisions with each fire start to consider the land, resource and incident objectives, and to decide the appropriate suppression response and tactics which result in minimum costs and minimum resource damage. MIST is not intended to represent a separate or distinct classification of firefighting tactics but rather a mind set how to suppress a wildfire while minimizing the long-term effects of the suppression action. MIST is the concept of using the minimum tool to safely and effectively accomplish the task. Use of MIST must not compromise firefighter safety or the effectiveness of suppression efforts.

14) Was there a vegetation ecologist on the consultation team?

A Fire Ecologist, employed by the NPS Midwest Region, was instrumental in the development of the Fire Management Plan Environmental Assessment (FMP-EA). This person visited the park to assess the current vegetation prior to her involvement in the development of the FMP-EA. This person not only has a background in vegetation ecology, but has specialized training in how fire, or lack of fire, will influence the vegetation of a particular ecosystem.

15) Will fire retardant chemical be excluded from all surface waters?

Every attempt will be made to exclude fire retardant chemical from surface waters, including perennial and intermittent streams. These steps are outlined in the Fire Management Plan – Environmental Assessment (FMP-EA) on pages 2-14 and 2-15.